

AMENDMENTS TO THE CLAIMS

1. (Original) A process of producing man-made vitreous fibres having a phosphorus content of at least 0.5%, measured as weight % P_2O_5 , comprising
providing a charge of mineral material which includes briquettes,
melting the charge in a furnace to provide a melt and fiberising the melt
to form fibres,
wherein the briquettes comprise a non-virgin rock material comprising at least 2% phosphorus, the non-virgin rock material being selected from the group consisting of sewage sludge ash, bone meal ash, granulated sewage sludge slag and mixtures thereof.
2. (Currently Amended) ~~[[A]]The~~ process according to claim 1 in which the non-virgin rock material comprises at least 3% phosphorus.
3. (Currently Amended) ~~[[A]]The~~ process according to claim 2 in which the non-virgin rock material comprises at least 5% phosphorus.
4. (Currently Amended) ~~[[A]]The~~ process according to ~~any preceding claim 1~~ in which the non-virgin rock material comprises sewage sludge ash.
5. (Currently Amended) ~~[[A]]The~~ process according to ~~any preceding claim 1~~ in which the non-virgin rock material comprises granulated sewage sludge slag.
6. (Currently Amended) ~~[[A]]The~~ process according to ~~any preceding claim 1~~ in which the briquettes comprise at least 3% by weight, preferably at least 4% by weight, more preferably at least 5% by weight non-virgin rock material.

7. (Currently Amended) ~~[[A]]The process according to any preceding claim 1~~ in which the briquettes comprise not more than 25%, preferably not more than 15%, more preferably not more than 10%, by weight non-virgin rock material.

8. (Currently Amended) ~~[[A]]The process according to claim 1~~ in which the non-virgin rock material is granulated sewage sludge slag and the briquettes comprise not more than 50 wt.% granulated sewage sludge slag.

9. (Currently Amended) ~~[[A]]The process according to claim 1~~ in which the non-virgin rock material is sewage sludge ash and the charge of mineral material contains from 1 to 25%, preferably from 4 to 15% sewage sludge ash, by weight of charge.

10. (Currently Amended) ~~[[A]]The process according to any preceding claim 1~~ in which the briquettes additionally comprise waste.mineral wool.

11. (Currently Amended) ~~[[A]]The process according to any preceding claim 1~~ in which the briquettes are produced at least two days prior to their inclusion in the charge.

12. (Currently Amended) ~~[[A]]The process according to any preceding claim 1~~ in which the fibres comprise less than 22% aluminium, preferably less than 17%, most preferably between 10 and 15% aluminium, measured as weight % Al_2O_3 .

13. (Currently Amended) ~~[[A]]The process according to any preceding claim 1~~ in which the fibres comprise from 0.5 to 10% phosphorus, preferably less than 5% phosphorus, measured as weight % P_2O_5 .

14. (Currently Amended) ~~[[A]]The process according to claim 14~~ in which the fibres comprise at least 1%, preferably at least 2%, phosphorus.

15. (Currently Amended) ~~[[A]]The process according to any preceding claim 1 in~~ which at least 90%, preferably at least 92%, more preferably at least 95%, of the phosphorus in the charge is transferred into the melt and the fibres.

16. (Currently Amended) ~~[[A]]The process according to any preceding claim 1 in~~ which the furnace is a shaft furnace, preferably a cupola furnace.

17. (Currently Amended) ~~[[A]]The process according to claim 16 in which iron is~~ tapped from the furnace and is preferably reused in an iron foundry.

18. (Currently Amended) ~~[[A]]The process according to any preceding claim 1 in~~ which the fibres comprise less than 4% aluminium, measured as weight percent Al_2O_3 .

19. (Original) A process of producing man-made vitreous fibres comprising providing a charge of mineral material which includes briquettes, melting the charge in a furnace to provide a melt and fiberising the melt to form fibres, wherein the briquettes comprise sewage sludge ash.

20. (Original) A process of producing man-made vitreous fibres comprising providing a charge of mineral material which includes powder form material selected from the group consisting of sewage sludge ash, bone meal ash, granulated sewage sludge slag and mixtures thereof, melting the charge in a furnace to provide a melt and, fiberising the melt to form fibres.

21. (Currently Amended) ~~[[A]]The process according to claim 20 in which the~~ powder form material is selected from sewage sludge ash, bone meal ash and mixtures thereof.

22. (Currently Amended) [[A]]The process according to claim 20 comprising forming fibres into a product which is an insulation product, growth substrate or a granulated filler.

23. (Currently Amended) [[A]]The process according to claim 21 in which the product is used for sound insulation or fire protection.